



### **MCoMcc35-001**

#### **Evaluation of the performance of Zinc-Rich anticorrosive coatings**

Velasco, D.C.R.(1); Campos, M.T.(2); Lopes, F.P.D.(2); Vieira, C.M.F.(2);

(1) UENF / IFFLUMINENSE; (2) UENF;

Corrosion prevention can be carried out in several ways, with galvanic protection being one of the most effective. This, in addition to providing a barrier against fluid contact with the metallic substrate, provides cathodic protection. This method is commonly carried out using the hot immersion technique where a layer of zinc is deposited on the surface. However, there are zinc-rich coatings that can be used to replace galvanizing or to repair galvanizing defects, sometimes referred to as “cold galvanizing”. These have differences in performance compared to traditional galvanizing, given the differences in application processes. In this context, this study aims to characterize the performance of different zinc-rich coatings used to repair and/or replace conventional galvanizing. The coatings were subjected to evaluations of performance (solids content), adhesion (adhesion through pull-out) and resistance to accelerated aging (exposure to condensation cycles and ultraviolet radiation), followed by analysis of adhesion after the aging process. This work made it possible to compare the different coatings studied, filling gaps in information about these materials